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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/825,174

04/16/2004

Nurettin Burcak Beser

0023-0125

8274

44987 7590 08/18/2008

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EXAMINER

HOFFMAN, BRANDON S

ART UNIT

PAPER NUMBER

2136

MAIL DATE

DELIVERY MODE

08/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/825,174	Applicant(s) BESER, NURETTIN BURCAK	
	Examiner BRANDON S. HOFFMAN	Art Unit 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-17 and 19-38 is/are rejected.
- 7) ☒ Claim(s) 6 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-38 are pending in this office action.
2. Applicant's arguments, filed May 13, 2008, have been fully considered but they are not persuasive.

Claim Rejections

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

4. Claims 1-5, 7-17, and 19-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chavez et al. (U.S. Patent Pub. No. 2003/0223431) in view of Bardalai et al. (U.S. Patent No. 6,515,966).

Regarding claims 1, 16, and 17, Chavez et al. teaches a method/system/device of authenticating a resource reservation message sent between a source node and a destination node in a network, comprising:

- Constructing an outgoing resource reservation message, the message comprising a plurality of objects (fig. 4 and paragraph 0035);
- Selecting multiple objects of the message (paragraph 0035);

- Calculating a message integrity value using the selected multiple objects of the message (paragraph 0053);
- Sending the message **including the inserted integrity value and the identification values**, from the source node, across a network to the destination node (fig. 5); and
- Authenticating the multiple objects of the message at the destination node using the message integrity value and the constructed **identification values** (paragraph 0053).

Chavez et al. does not teach constructing **identification values** identifying each of the selected multiple object, and inserting the calculated integrity value and the constructed **identification values** in the message.

Bardalai et al. teaches constructing **identification values** identifying each of the selected multiple object (fig. 4A), and inserting the calculated integrity value and the constructed **identification values** in the message (fig. 4A, ref. num 232).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine constructing identification values identifying each of the selected objects and inserting an integrity value and the identification values in the message, as taught by Bardalai et al., with the method/system/device of Chavez et al.

It would have been obvious for such modifications because the list helps identify the next hop for the signal (see col. 8, lines 29-43 of Bardalai et al.).

Regarding claim 2, Chavez et al. as modified by Bardalai et al. teaches further comprising inserting **a node identifier in the message, where the node identifier identifies** either the source node or the destination node (see paragraph 0025 of Chavez et al.).

Regarding claim 3, Chavez et al. as modified by Bardalai et al. teaches where calculating the message integrity value further **comprises calculating the message integrity value using** the **node** identifier (see fig. 4A, ref. num 240 of Bardalai et al.).

Regarding claim 4, Chavez et al. as modified by Bardalai et al. teaches where the identifier comprises a network address associated with at least one of the source node or the destination node (see paragraph 0025 of Chavez et al.).

Regarding claim 5, Chavez et al. as modified by Bardalai et al. teaches where calculating the message integrity value **comprises calculating the message integrity value based on** the network address (see fig. 4A, ref. num 244 of Bardalai et al.).

Regarding claims 7 and 19, Chavez et al. as modified by Bardalai et al. teaches where each of the plurality of objects comprises a field of the message (see fig. 3 of Chavez et al.).

Regarding claims 8, 20, and 27, Chavez et al. as modified by Bardalai et al. teaches where the message comprises at least one of a packet, a cell, a datagram, a fragment of a packet, a fragment of a datagram, and a fragment of a cell (see paragraph 0027 of Chavez et al.).

Regarding claims 9, 21, 28, and 34, Chavez et al. as modified by Bardalai et al. teaches where the message comprises a Resource Reservation Protocol (RSVP) path message (see fig. 6 of Chavez et al.).

Regarding claims 10, 22, 29, and 35, Chavez et al. as modified by Bardalai et al. teaches where the message comprises a Resource Reservation Protocol (RSVP) reservation request message (see paragraph 0050 of Chavez et al.).

Regarding claims 11, 23, and 30, Chavez et al. as modified by Bardalai et al. teaches where calculating the message integrity value comprises using a cryptographic algorithm (see fig. 4A, ref. num 232 of Bardalai et al.).

Regarding claims 12, 24, 31, and 36, Chavez et al. as modified by Bardalai et al. teaches where the cryptographic algorithm comprises at least one of an MD5 message digest algorithm, a secure hash algorithm (SHS), a RIPEMD-160 algorithm, a message authentication code (MAC) algorithm, a Cyclical Redundancy Checking (CRC) algorithm, a private key encryption algorithm, **or** a public encryption key algorithm (see fig. 4A, ref. num 232 of Bardalai et al.).

Regarding claim 13, Chavez et al. as modified by Bardalai et al. teaches further comprising extracting, at the destination node, the **identification values** identifying the selected multiple objects from the message (see fig. 5 of Chavez et al.).

Regarding claim 14, Chavez et al. as modified by Bardalai et al. teaches where the authenticating the multiple objects of the message at the destination node using the message integrity value comprises authenticating the multiple objects of the message specified by the extracted **identification values** (see paragraph 0053 of Chavez et al.).

Regarding claims 15, 25, 32, and 37, Chavez et al. as modified by Bardalai et al. teaches where the message is used by routers in the network for establishing a desired level of quality of service for transmission between the source and the destination node (see paragraph 0038 of Chavez et al.).

Regarding claims 26, 33, and 38, Chavez et al. teaches a method/device/system of performing resource reservation authentication between a source node and a destination node in a network, comprising:

- Constructing an outgoing resource reservation message **to reserve resources in a network between the network device and a destination node** (fig. 4);
- Determining, at the source node, an authentication value using at least a portion of the message (paragraph 0053);
- Forwarding the message **including the inserted authentication value** from the source node to the destination node across the network (fig. 5); and
- Authenticating the message at the destination node using the authentication value (paragraph 0053).

Chavez et al. does not teach inserting the authentication value in the message.

Bardalai et al. teaches inserting the authentication value in the message (fig. 4A, ref. num 232).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine inserting the authentication value in the message, as taught by Bardalai et al., with the method/system/device of Chavez et al. It would have been obvious for such modifications because the inserted authentication value travels with the message to the destination for verification of authentic data.

Allowable Subject Matter

5. Claims 6 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicants argue:

- a. The combination of references do not teach sending the message including the integrity value and the identification values, from the source node or authenticating the multiple objects of the message at the destination node using the integrity values.
- b. The combination of references do not teach dependent claim 5, that is, the integrity value is computed using the network address.

Regarding argument (a), examiner disagrees with applicant. Chavez teaches, at paragraph 0053, that authentication takes place using an integrity object on a device that is RSVP aware (such as a gatekeeper or gateway). Figure 4, of Chavez, shows the communication is received from a sender. Reference number 408 configures the objects (plural) and reference number 412 sends the message on to the destination (as explained in corresponding paragraph 0036). The fact that the reference only refers to a cited element once in the specification is not a reasonable argument of why a reference does not teach an element.

Regarding argument (b), examiner disagrees with applicant. Integrity values, as known in the prior art, are mathematical computation performed on a data set to arrive at a value (integrity value) that represents what the data looks like. If any changes are made, the integrity value changes, therefore won't match the previously computed integrity value. Similarly, the integrity value (fig. 4A, ref. num 232) is a composition of the entire data, which includes the control path (fig. 4A, ref. num 244). The control path lists node addresses which act like network addresses because the node addresses determine the next location.

Conclusion

7. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANDON S. HOFFMAN whose telephone number is (571)272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser G. Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brandon S Hoffman/
Examiner, Art Unit 2136

/Nasser G Moazzami/
Supervisory Patent Examiner, Art Unit 2136